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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,627	07/25/2003	Calvin F. Quate	003848.00129	9615
7055	7590	08/01/2005	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			FORMAN, BETTY J	
			ART UNIT	PAPER NUMBER
			1634	

DATE MAILED: 08/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/626,627	QUATE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	BJ Forman	1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 24 May 2005.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 113-142 is/are pending in the application.

4a) Of the above claim(s) 113-122 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 123-142 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_

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**DETAILED ACTION*****Election/Restrictions***

1. Applicant's election with traverse of Group II, Claims 123-142 in the reply filed on 24 May 2005 is acknowledged. The traversal is on the grounds that it would not be undue burden to examine the claims of both groups I and II. However, it is maintained that undue burden would be required to examine the claims of groups I along with claims of group II as evidenced by the fact that the claims of groups I and II have acquired a separate status in the art as recognized by their different classifications as recognized by their divergent subject matter and because a search of the subject matter of invention I is not co-extensive with a search of inventions II-V. For example a search for the subject matter of Group I would encompass a search of monomers, monomer protecting groups and functional groups, deprotecting, activating and linking steps and accompanying chemistry. None of these elements are required in a search of the structural components in the apparatus claimed in Group II. Further, a search indicating the process is novel or nonobvious would not extend to a holding that the product itself is novel or nonobvious; similarly, a search indicating that the product is known or would have been obvious would not extend to a holding that the process is known or would have been obvious.

The requirement is still deemed proper and is therefore made FINAL.

Claims 113-122 are withdrawn from consideration.

Claims 123-142 are under prosecution.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any

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person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 123-142 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The Preliminary Amendment filed 2 December 2004 added new Claims 123-142 drawn to an apparatus. The new claims contain numerous phrases, terms, structural components and functions of the apparatus not disclosed in the originally filed specification. The non-described elements are as follows:

Claim 123: "variable spectrum filter"; more than one "spatially separated wavelengths"; and computer control of the "relative position" of the filter and or light output.

Claim 124: computer control of the "position" of the filter in "relation to the light source"; and "time and wavelength control" of the passed light by the filter.

Claim 125: more than one wavelength of light"; "a sensor"; "an output signal"; and computer direction of signal position and light source based on the output of the signal.

Claim 126: "visible or infrared light".

Claim 127: magnification of the light in more than one dimensions.

Claim 128: "two-dimensional" microarray mirror.

Claim 129: more than one "diffusion lenses".

Claim 131: "CCD camera"; measurement of "intensity and wavelength"; and computer control of the CCD camera.

Claims 132: "combination of UV light, visible and infrared light".

Claim 133: more than one wavelength; and activation of one or more cellular functions".

Claim 134: more than one wavelength.

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Claim 135: more than one wavelength.

Claim 136: more than one wavelength; and “crosslink a molecule”.

Claim 137: more than one wavelength; “a variable spectrum generator”; more than one spatially separated wavelengths; and computer control of the generator.

Claim 138: computer control of the “position of the variable spectrum generator”; and control of time and wavelength of the light.

Claim 139: more than one wavelength; sensor; output signal from the sensor to the computer; and computer directs position of the generator and light source.

Claim 140: “xenon lamp”; “mercury lamp”; and combination of xenon, mercury and laser.

Claim 141: “total internal reflection mirror”.

Claim 142: “movable platform”; and computer control of the platform, more than one spatially separated wavelengths; “multiple repetitive exposures” and “variable spectrum generator”.

The instant specification and priority documents have been thoroughly reviewed for disclosure of the above listed elements. However, the documents fail to define or provide any disclosure to support the newly claimed elements.

MPEP 2163.06 notes “IF NEW MATTER IS ADDED TO THE CLAIMS, THE EXAMINER SHOULD REJECT THE CLAIMS UNDER 35 U.S.C. 112, FIRST PARAGRAPH - WRITTEN DESCRIPTION REQUIREMENT. *IN RE RASMUSSEN*, 650 F.2d 1212, 211 USPQ 323 (CCPA 1981).” MPEP 2163.02 teaches that “Whenever the issue arises, the fundamental factual inquiry is whether a claim defines an invention that is clearly conveyed to those skilled in the art at the time the application was filed...If a claim is amended to include subject matter, limitations, or terminology not present in the application as filed, involving a departure from, addition to, or deletion from the disclosure of the application as filed, the examiner should conclude that the claimed subject matter is not described in that application.” MPEP 2163.06 further notes “WHEN AN AMENDMENT IS FILED IN REPLY TO AN OBJECTION OR REJECTION BASED ON 35 U.S.C. 112, FIRST PARAGRAPH, A STUDY OF THE ENTIRE APPLICATION IS OFTEN NECESSARY TO DETERMINE WHETHER OR NOT “NEW MATTER” IS INVOLVED. APPLICANT SHOULD THEREFORE SPECIFICALLY POINT OUT THE SUPPORT FOR ANY AMENDMENTS MADE TO THE DISCLOSURE” (emphasis added).

***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 123-142 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,480,324 in view of Cerrina et al (U.S. Patent No. 6,375,903). Although the conflicting claims are not identical, they are not patentably distinct from each other because both claim sets are drawn to an apparatus for photolithography. The claims sets differ in that the instant claims more narrowly define the light source and spatial light modulator of the patent claims. However, Cerrina et al teach a similar apparatus wherein the preferred components include the instantly claimed light sources and a filter for variable spectrum (Column 7, line 19-Column 8, line 19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply the preferred light sources and filters of Cerrina et al to the '324 apparatus based on the preferred teaching of Cerrina (Column 7, line 19-Column 8, line 19).

6. Claims 123-142 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 71-73, 75-85, 87-94, 113-139, 170-194 of copending Application No. 10/223,719 in view of Cerrina et al (U.S. Patent No. 6,375,903). Although the conflicting claims are not identical, they are not

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patently distinct from each other because both sets of claims are drawn to an apparatus comprising computer controlled light source and filter. The claim sets differ in that the instant claims more narrowly define the light source and filter. However, Cerrina et al teach a similar apparatus wherein the preferred components include the instantly claimed light sources and filter for variable spectrum (Column 7, line 19-Column 8, line 19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply the preferred light sources and filters of Cerrina et al to the '719 apparatus based on the preferred teaching of Cerrina (Column 7, line 19-Column 8, line 19).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### **Conclusion**

7. No claim is allowed.
8. The examiner and art unit for this application has changed. Please address future correspondence to BJ Forman, Art Unit: 1634.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BJ Forman whose telephone number is (571) 272-0741. The examiner can normally be reached on 6:00 TO 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones can be reached on (571) 272-0745. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

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For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

  
BJ Forman, Ph.D.  
Primary Examiner  
Art Unit: 1634  
July 27, 2005